WAK.163

Serial No.: 10/561,608

2

AMENDMENTS TO THE CLAIMS:

Please cancel claims 4-8, 13, 16-24 and 31-47 without prejudice or disclaimer, add new claims 48-53, and amend the claims as follows:

1. (Currently Amended) A semiconductor device comprising a MIS type field effect transistor, wherein the transistor <u>comprises</u>: eomprising:

a silicon substrate:

a gate insulating film comprising a high-dielectric-constant metal oxide film and a silicon containing insulating film lying between the metal oxide film and the silicon substrate;

a silicon containing gate electrode formed on the gate insulating film, a gate length of said silicon containing gate electrode being not greater than 1 µm; and

a sidewall including silicon oxide as a constituting material, which is formed on each lateral face side of the gate electrode; and

wherein a silicon nitride film is interposed between the sidewall and at least the lateral face of the gate electrode, and

wherein the silicon nitride film covers the lateral face of the high-dielectricconstant metal oxide film, and a silicon oxide film underlies the silicon nitride film.

2. (Previously Presented) The semiconductor device comprising the MIS type field effect transistor according to Claim 1, wherein the silicon nitride film is laid between the sidewall and the silicon substrate.

WAK.163

Serial No.: 10/561,608

3. (Withdrawn) The semiconductor device comprising the MIS type field effect

transistor according to Claim 1, wherein the silicon nitride film is absent between the sidewall

3

and the silicon substrate.

4-8. (Canceled)

9. (Previously Presented) The semiconductor device according to Claim 1, wherein a

silicon nitride film is laid between the high-dielectric-constant metal oxide film and the gate

electrode.

(Previously Presented) The semiconductor device according to Claim 1, wherein the 10.

high-dielectric-constant metal oxide film contains hafnium (Hf).

(Previously Presented) The semiconductor device according to Claim 1, wherein a 11.

dielectric constant of the high-dielectric-constant metal oxide film is not less than 10.

(Previously Presented) The semiconductor device according to Claim 1, wherein the 12.

high-dielectric-constant metal oxide film is absent beneath the sidewall.

13-24. (Canceled)

25. (Previously Presented) The semiconductor device according to Claim 1, wherein a

thickness of the silicon oxide film is within a range of 1 to 20 nm.

WAK.163

Serial No.: 10/561,608

(Previously Presented) The semiconductor device according to Claim 1, wherein a 26.

4

thickness of the silicon oxide film is within a range of 5 to 10 nm.

27. (Previously Presented) The semiconductor device according to Claim 1, wherein a

thickness of the silicon nitride film is within a range of 1 to 10 nm.

28. (Withdrawn) The semiconductor device according to Claim 1, wherein the high-

dielectric-constant metal oxide film has a nitridation region on each of its lateral face sides.

29. (Withdrawn) The semiconductor device according to Claim 1, wherein the nitridation

region is formed within a range of 1 to 20 nm in the direction from its lateral face to inside of

the gate electrode, and a nitrogen content in the region is not less than 5%.

(Withdrawn) The semiconductor device according to Claim 1, wherein the nitridation 30.

region is formed within a range of 1 to 20 nm in the direction from its lateral face to inside of

the gate electrode, and a nitrogen content in the region is not less than 10%.

31-47. (Canceled)

48. (New) The semiconductor device according to claim 1, wherein said gate length is

not greater than 200 nm.

(New) The semiconductor device according to claim 1, wherein said gate length is not 49.

greater than 100 nm.

WAK.163

Serial No.: 10/561,608

50. (New) A semiconductor device comprising a MIS type field effect transistor, wherein

5

the transistor comprises:

a silicon substrate;

a gate insulating film comprising a high-dielectric-constant metal oxide film

and a silicon containing insulating film lying between the metal oxide film and the silicon

substrate; and

a silicon containing gate electrode formed on the gate insulating film, a gate length of

said silicon containing gate electrode being not greater than 1 µm.

(New) The semiconductor device according to claim 50, wherein the transistor further 51.

comprises a silicon nitride film formed so as to cover a lateral face of the high-dielectric-

constant metal oxide film.

52. (New) The semiconductor device according to claim 1, wherein said gate length is not

greater than 200nm,

wherein a thickness of the silicon oxide film is with a range of 5 nm to 10 nm, and

wherein a thickness of the silicon nitride film is within a range of 1 nm to 10 nm.

(New) The semiconductor device according to claim 1, wherein said gate length is not 53.

greater than 100 nm,

wherein a thickness of the silicon oxide film is within a range of 5 nm to 10 nm, and

wherein a thickness of the silicon nitride film is within a range of 1 nm to 10 nm.